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**ISOLATION, SCREENING AND CHARACTERIZATION OF LIPASE PRODUCING YEAST**

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**ABSTRACT**

Yeasts have scarcely been reported as lipase producers compared to bacteria and filamentous fungi. Lipase are versatile enzymes that catalyze the hydrolysis of long chain triglyceride into free fatty acids (FFA) diacylglyverol, monoacylglycrol and glycerol. Lipase are relatively stable and are able to catalyze various reactions, they are of potential importance for diverse industrial application. This present study was focused on the isolation of lipase producing yeast from different samples (oil contaminated soil) from Mechanic villages, (kitchen waste water) from Chrisland, (onion, shear butter) from the market. A total of 28 different isolates were recovered from the samples, out of which 10 isolates were selected for primary screening based on their distinct colony morphology. Primary screening was done in tween-80 agar plate were maximum clear zone was about (0.2±0.0mm to 3.0±0mm) in diameter respectively and phenol red-olive oil agar were a drop in pH to a more acidic pH will result into change of color from red to orang, indicating the production of the enzyme lipase. The lipase activity in each fermentation medium was confirmed by measuring the amount of fatty acid liberated from the medium by titrimetric analysis using crude extract. Three yeast (*Saccharomyces cerevisiae Lipomyces* sp. *Saccharomyces cerevisiae*)had the highest lipase enzyme produced (49.38±1.15μ/mL, 33.33±1.15μ/Ml, and 30.30±1.15μ/mL) in 1% olive oil medium for 72 hours. The optimum pH and temperature for all yeast isolates were 5.0 and 300C respectively. This study suggests lipolytic yeast such as *Saccharomyces cerevisiae* and *Lipomyces* sp for lipase production.